IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant(s): Odorfer et al.   Examiner: Hashem, Lisa

Serial No.:   09/936,779   Group Art Unit: 2645

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For: SYSTEM FOR MOBILE   Dated: January 18, 2007
               TELECOMMUNICATIONS

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' BRIEF

Sir:

(1) REAL PARTY IN INTEREST

The real parity in interest is VIAG Interkom GmbH & Co. having an address of

Elsenheimerstr. 11, D-80687 Munich, Federal Republic of Germany.

(2) RELATED APPEALS AND INTERFERENCES

To the best of Appellants' knowledge and belief, there are no related appeals or

interferences.

(3) STATUS OF CLAIMS

Of Claims 1-62, Claims 1-27 have been canceled without prejudice; Claims 61 and

62 have been allowed.

Claims 28-60 stand finally rejected and constitute the claims on appeal. A copy of

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the appealed claims is contained in the Claims Appendix (9) *infra*.

(4) STATUS OF AMENDMENTS

An amendment has been filed subsequent to the final rejection set forth in the
Office Action mailed April 13, 2006 and amending allowed Claims 61 and 62 into
independent form.   This amendment has been entered for purposes of appeal in box. no. 7
of the Advisory Action mailed December 14, 2006.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

The appealed claims are directed to a method and system for finding the <u>exact</u>
location of a <u>mobile</u> telephone (and user thereof) within a subscriber area, with a mobile
telecommunications system operating, e.g., in a GSM mode (Global System for Mobile
Communications). A subscriber to whom a subscriber number has been allocated can <u>now</u>
be <u>permanently</u> reached within the total area served by the corresponding switching unit,
i.e., so-called provider. These and other advantages are attained by the present invention
which is directed to (among other features) providing or operating a communication system
for mobile radio telephones having at least one <u>subscriber</u> area <u>within</u> a predetermined
<u>overall</u> area and <u>having</u> at least one subscriber number, at least one radio cell <u>transmitting</u>
a <u>coordinate</u>-containing signal to a <u>mobile</u> user unit within this <u>overall</u> area , and
calculating whether the <u>coordinates</u> transmitted <u>by</u> the <u>radio cell</u> lie within the <u>subscriber</u>
area.

In other words, at least one radio cell is arranged in the overall area and <u>transmits</u> a
signal containing <u>coordinates</u>. The means for calculating whether or not the subscriber is

within at least one subscriber area, calculates whether those transmitted coordinates by the radio cell lie within a subscriber area or not. The present invention ensures tariff location is precisely controlled by allocating the subscriber area(s). Furthermore, considerable freedom is provided the subscriber regarding when the subscriber would like to communicate and with which configuration.

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 28, 32-35, 38, 39, 43, 44 and 53-60 stand rejected under 35 U.S.C. §103 as obvious over U.S. Pat. No. 6,233,448 to Alperovich et al (hereinafter "Alperovich et al") in view of newly-cited U.S. Pat. No. 5,945,949 to Yun (hereinafter "Yun") in paragraphs 2 and 3 of the Final Office Action, while Claims 29-31, 36, 37, 40-42 and 45-52 stand rejected additionally in view of U.S. Pat. No. 5,568,153 to Béliveau (hereinafter "Béliveau") in paragraphs 5 and 6 of the Final Office Action.

(7) ARGUMENT

(A) ALPEROVICH ET AL FAIL TO PROVIDE OR SUGGEST ANY MOTIVATION TO
MAKE THE CLAIMED INVENTION

In paragraph 2 on page 2 of the Final Office Action, the Examiner asserts Alperovich et al teach a communication system including at least one radio cell transmitting signal-containing coordinates and means for calculating whether the coordinates lies within the subscriber area, citing column 3, lines 29-64 of Alperovich et al. However, column 3, lines 29-64 of Alperovich et al discloses that the mobile phones preferably include circuitry for monitoring position of the mobile phones. Examples include the mobile phone comprising a global positioning system receiver used to determine coordinates of the

mobile station; an alternative approach involves calculating these coordinates by measuring timing advance or cell identification with very small cells. More particularly, column 3, lines 61-64 of Alperovich et al relates to calculating position, e.g., by timing advance, and not transmitting a signal containing coordinates to a mobile user unit.

However, there is neither any hint nor motivation from Alperovich et al to transmit a signal containing coordinates from a radio cell to a mobile user unit within the system. Alperovich et al explicit incorporate such circuitry into the mobile phone for monitoring position of the mobile phone, as disclosed at column 3, lines 29-31, because transmitting coordinates from a radio cell to mobile phone is not even contemplated by this reference.

Alperovich et al simply disclose some methods for determining position of a mobile phone (column 3, lines 29-52) which are, e.g., use of a global positioning system contained within the mobile station and allow determining the actual location of the mobile station. Other methods include measuring the timing advance or propagation delay of signals traveling between the mobile station and a plurality of base station transceivers, already known from Béliveau, to be addressed further *infra*. However, the claimed invention is not based upon just any kind of determining whether a mobile cell phone is within a certain area, but is rather based on the concept of a separate radio cell transmitting a signal to the mobile phone and containing coordinates to determine if the mobile phone is within the subscriber area.

An important advantage of the present invention is reliably providing indication whether a user is located within a subscriber area by transmitting coordinates of the radio cell responsible for communicating with the mobile user units, providing the advantage of

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being independent from network changes of adding new cells or changing cell IDs or location area codes of the cells. The only information necessary for determining whether the subscriber is in the concomitant subscriber area, is the coordinates transmitted by the radio cell.

All other prior art methods are more complicated and/or less reliable. The disadvantages suffered by the prior art systems and methods are eliminated by the claimed invention in which coordinates of the radio cell , but not the cell IDs, are transmitted independently from denomination of the cells or location areas.

As pointed out *supra*, there is no hint in Alperovich et al of adapting a communications system so that the radio cell transmits coordinates to a mobile station, on the basis of which it is determined whether or not the mobile station lies within a subscriber area. Alperovich et al disclose storing coordinates x,y in data area 60 to allocate a certain service or other action with these coordinates. However, the use of this data area requires the coordinates x,y be known. In contrast, in the claimed invention, knowledge of the coordinates of the mobile station is based upon the coordinates of the radio cell which transmits its coordinates to the mobile station which is located in the area of this cell, providing, e.g., the advantage of being independent from any kind of cell reconfiguration such as a change of the cell IDs or location area codes.

The present invention allows reliable determining of actual position of the mobile station independent of any type of cell reconfiguration or amendment, such as additions or deletions. There is no suggestion in any prior art document of applying such a system or

method, while there is certainly no <u>motivation</u> for one skilled in the art to adapt a prior communication system so that <u>cells</u> transmit <u>their</u> coordinates <u>to</u> a <u>mobile</u> station.

More particularly, Alperovich et al are directed to a system for performing selected actions based upon <u>position</u> of a <u>mobile station,</u> i.e., phone 14, e.g., within a home or business 10. The selected actions include forwarding all calls to a landline or wireline phone 12 located within the home or business 10, when the <u>mobile phone</u> 14 is also located within the home or business (Fig. 1 and column 3, lines 25-27). To determine <u>mobile phone</u> location, the mobile phone 14 preferably includes circuitry such as a global positioning system (GPS); alternatively, the <u>timing</u> advance or propagation <u>delay</u> of signals between the mobile phone 14 and a plurality of base station transceivers 32 can be used to calculate position of the mobile phone 14. These two measuring techniques are <u>also</u> disclosed in Béliveau <i>infra</i> at column 5, line 36-column 6, line 27.

It is also stated at column 3, lines 41-45 and 48-52 in Alperovich et al, when very <u>small</u> distance is involved (e.g., within a home), position of the <u>mobile phone</u> can be monitored by determining the identity number of the cell in which the <u>mobile phone</u> 14 is located. It is <u>explicitly</u> stated at column 3, lines 46-48 of Alperovich et al the <u>particular</u> method used for positioning is <u>not</u> a critical aspect of their invention. Accordingly, Alperovich et al disclose nothing more than what has been described in Béliveau <i>infra</i> and <u>fail</u> to disclose arranging a radio cell F1, F2, F3, F4 within a subscriber area <u>HZ</u> and <u>then</u> calculating whether coordinates transmitted by the <u>radio cell</u> F1, F2, F3, F4 lie within the subscriber area <u>HZ</u>.

The data array 60 shown in Fig. 2 of Alperovich et al store a plurality of <u>activation</u> locations 62 to determine, e.g., activation or deactivation of a telecommunications feature (column 3, line 65–column 4, line 32). This data array 60 can be stored in either the mobile phone 14, home location register 40 or other locations within the public land mobile network 30. In one embodiment shown in Fig. 3, a call forwarding feature to the landline or wireline phone 12 is deactivated and mobile phone 14 activated, when the mobile phone 14 leaves the prescribed home location 10 (column 5, lines 29-45). In another embodiment as shown in Fig. 4, comparisons between current location of a mobile phone 14 and pre-selected location 62 are <u>only</u> performed when the mobile phone 14 is <u>within</u> that location 62 (column 2, lines 36-40 and column 6, lines 12-65).

Accordingly, Alperovich et al <u>fail</u> to disclose the advantageous features of the present invention which improve versatility of mobile phone use and reduce operating costs.

(B)   YUN FAILS TO TEACH OR SUGGEST ADDING ANY MISSING ELEMENT TO
        <u>ALPEROVICH ET AL WHICH WOULD LEAD TO THE CLAIMED INVENTION</u>

On the continuation sheet of Interview Summary PTOL-413 mailed September 1, 2006, the Examiner asserts Yun teaches "at least one radio cell arranged in the overall area to transmit a signal containing coordinates to a mobile user unit within the system," citing column 12, lines 22-38 and column 13, line 59- column 14, line 21 as allegedly disclosing this feature. It is also asserted by the Examiner in paragraph 2 of the Final Office Action, Yun discloses at least one radio cell 102-1 through 102-7 arranged in an overall area 100 in Fig. 5 to transmit a signal containing coordinates to a <u>mobile</u> user unit 104 within the

system, e.g., via one of base stations BS1 through BS7, citing column 11, line 55– column 14, line 37. However, this portion of Yun upon which the Examiner relies, discloses nothing more than determining position of the mobile unit 104 by, e.g., measuring time delay between transmitted and received time stamps (column 12, lines 22-32). Accordingly, Yun discloses nothing more than what is already known from Alperovich et al (column 3, lines 35-41) and most certainly does not disclose transmitting coordinates from (stationary) radio cells to a mobile unit as in the claimed invention.

In particular, column 12, lines 28-33 of Yun discloses the calculated mobile position may be converted to latitude and longitude coordinates by the base station database. As with Alperovich et al *supra*, this passage relates to converting information after calculating position of the mobile station 104 by time delay and not transmitting a signal containing coordinates to the mobile user unit as in the claimed invention. It is clear from both the Abstract and column 11, line 55 – column 14, line 37 of Yun, this reference unequivocally fails to show base stations transmitting a signal comprising the coordinates of the base stations, and discloses nothing more than measuring time delay between transmitted and received time stamps.

(C)　　BÉLIVEAU FAILS TO ADD TO ALPEROVICH ET AL AND/OR YUN WHICH WOULD RENDER OBVIOUS THE INVENTION RECITED IN CLAIMS 29-31, 36, 37, 40-42 AND 45-52

Béliveau discloses basing localization of a mobile phone on the time required for a signal to travel between two locations. As explicitly described at column 6, lines 15-28:

> The time required for a signal to travel from the mobile station 20 to a base station is indicative of the distance from the mobile station to the

base station. Once the base stations 21-23 are synchronized to start
timing when the mobile station 20 transmitts[sic] a signal, the time of
reception at the base stations 21-23 establishes radii 24-26 upon
which the mobile station must be located. When three or more base
stations receive the signal, then the mobile station 20 is located at the
intersection of the three or more radii.

Once the position of the mobile station is known, the position
is converted to latitude and longitude coordinates, and it is
determined whether the mobile station is within the
subscriber's Home area [emphasis added].

Thus, the time for a signal to travel from the mobile station to a cell site base station

is measured and indicative of the distance of the mobile phone from this base station. By

using three or more base stations, it is possible, according to Béliveau, to determine the

location of the mobile station based upon the times required for the respective signals to

travel between the mobile station and corresponding base stations. The mobile phone is

located at the intersection of three or more radii.

This method and system of Béliveau require the mobile phone to be located within

the area of at least three base stations, with it being necessary to synchronize the base

stations to start timing when the mobile station transmits a signal. Furthermore, the mobile

phone must transmit a signal to the base station, increasing signaling traffic. These

disadvantages are explicitly avoided with the communication system and method recited

in the claimed invention. In particularly, it is unnecessary to locate the mobile phone in

the area of more than one base station. It is sufficient for the mobile phone to receive

coordinates from the cell responsible for the transmission. Based upon these coordinates,

it is determined whether or not the cell forms part of the subscriber area.

Thus, Beliveau neither discloses nor suggests a cell transmitting characterizing coordinates which are used for determining whether the mobile phone is located in a subscriber area.

It is asserted by the Examiner in paragraphs 5 and 6 of the Final Office Action that the Abstract, Figs. 1 and 2, column 4, lines 49-61 and column 5, lines 15-35 of Béliveau disclose the specific features recited in Claims 29-31, 36, 37, 40-42 and 45-52. More specifically, it is asserted Béliveau discloses a communication system for a mobile radio telephone system having at least one network unit or MSC which serves a predetermined overall area, at least one subscriber area (e.g., home area) within this overall area being stipulated and allocated at least one subscriber number.

However, the Abstract of Beliveau neither discloses nor renders obvious providing a radio cell which is arranged for transmitting a signal containing the coordinates characteristic for a cell. The Abstract merely states the home area of the subscriber may be defined by a center of the home area as well as a radius which is the border of the home area defined for the subscriber. The same applies for Fig. 1 of Béliveau which shows the personal home area 10 of a subscriber as a circular area with home street address 12 as the center. Reference numeral 13 defines the cells of the telecommunication network.

Fig. 2 of Béliveau also fails to either disclose or render obvious providing a radio cell which transmits its coordinates on the basis of which it is determined whether a subscriber is located in its home area. More particularly, Fig. 2 is directed to the process of setting up a personal home area. This process requires the OSS (Operation Support System) to retrieve the geographic coordinates of the subscriber's address which are then

transmitted to a Home Location Registry (HLR) for entry into the subscriber's profile record. The details of this process are outlined at column 5, lines 14 - 35. It is clear from this portion of the specification the program which is referred to in

Fig. 2 is the setup of a personal home area and does not refer to a method of locating mobile stations in a cellular network, which process is referred to in the same column beginning from line 36.

Column 5, lines 15 to 35 of Béliveau describes that, based on the subscriber's home street address a geographic information data base is accessed and transforms the subscriber's home street address into coordinate information. The data of the personal home area are then transmitted to the HLR along with specific services to be applied within this personal home area, such as a certain tariff system.

As pointed out above, the next paragraph in column 5, beginning with line 36, refers to methods of locating mobile stations in a cellular network. The methods which are described for locating mobile stations are based on the measurement of differences in times of arrival of mobile station transmissions at several cell sites or via satellite systems such as a Global Positioning System (GPS). An alternative method based on a search list of candidate handoff cells is further described. The method of measuring the differences in times of arrival of mobile station transmissions at several cell sites is illustrated in Figure 3; it is stated at column 6, lines 21 - 23, the location is the intersection of three or more radii.

It is stated in the next paragraph (column 6, lines 24 - 28) of Béliveau that after determining the current location of the subscriber based on latitude and longitude coordinates, it is determined whether the mobile station is within the subscriber's home

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area. The home area may be defined as outlined above by a center and a radius. As soon as the coordinates of the current location of the subscriber are known, it is possible to determine whether or not the mobile station is within the subscriber's home area.

However, the invention recited in Claims 29-31, 36, 37, 40-42 and 45-52 is <u>not</u> directed to the general teaching of determining whether or not the subscriber is in the home area, but to a <u>certain system and method of determining whether a mobile station is located in a personal home</u>. Nothing in Béliveau discloses that for this purpose, a radio cell transmits its coordinates which are <u>then</u> compared with the stored home area coordinates.

Column 4, lines 49 - 61 of Béliveau discloses the cell information (position, and antenna type and radius) is, *inter alia,* used to determine if the subscriber's call is set up in the home area. However, in the <u>same</u> paragraph, it is stated in line 58 that the subscriber's location is one of the parameters which is necessary to determine if the subscriber's call is set up in the home area. In other words, this paragraph of the specification is directed to a general working mode of the Mobile Switching Center (MSC) or Service Control Point (SCP) and requires that the subscriber's location is <u>known</u>. Nothing in this paragraph discloses or renders obvious that the coordinates of the radio cells are transmitted in order to <u>gather information</u> referring to the <u>current</u> subscriber's location.

Accordingly, none of Alperovich et al, Yun and Béliveau, either alone or in combination, teach or suggest making the invention recited in Claims 29-31, 36, 37, 40-42 and 45-52.

(D)   DEPENDENT CLAIMS 32-35, 38, 39, 43, 44 AND 53-60 ARE ALSO PATENTABLE
         OVER THE COMBINATION OF ALPEROVICH ET AL WITH YUN

Column 3, lines 8-11 of Alperovich et al just recite Fig. 1 shows a block diagram of

a mobile subscriber's household or business 10 served by both wireline 12 and mobile 14

phones. Column 3, line 65– column 4, line 32 of Alperovich et al. describes the data array

60 shown in Fig. 2 storing a plurality of activation locations 62 to determine, e.g.,

activation or deactivation of a telecommunications feature. Accordingly, Alperovich et al

fail to disclose or suggest the feature of writing a plurality of subscriber areas into a

subscriber code module as recited in Claim 32 or providing at least one storage area

containing the subscriber area on the subscriber code module (Claim 35).

Column 3, lines 8-28 of Alperovich et al. just describes positioning of a single base

station 33 while Column 3, lines 41-42 concerns monitoring the identity number of mobile

phone 14 within small distance. Furthermore, column 3, lines 8-11 concerns switching

from a mobile phone 14 to a wireline phone 12 when the subscriber is at home 10.

Therefore, Alperovich et al. also fail to teach or suggest a subscriber area encompassing

several radio cells and/or serving several user units (Claim 33) or allocating two subscriber

calls in a subscriber area (Claim 54). Column 5, lines 38-41 of Alperovich et al. relates to a

call-forwarding feature as Column 3, lines 8-28, so the feature of allocating a first mobile

subscriber number and second geographic subscriber number (Claim 34) is neither

disclosed nor suggested by Alperovich et al.

Column 3, lines 8-28 and column 4, line 55– column 5, line 20 of Alperovich et al.

fail to disclose providing at least one fixed station within the subscriber area (Claim 38)

with location coinciding with position of this _fixed station_ (Claim 39). These passages of

Alperovich et al concern ascertaining position of the mobile phone 14 based upon

information stored _within_ the mobile phone 14 for possible call-forwarding.

Column 3, lines 53-64 of Alperovich et al. concerns measuring position of the

mobile phone 14 on a regular basis with _calculation_ performed _either_ by the mobile phone

14 or public land mobile network 30 and _fail_ to suggest a subscriber _area_ is _stipulated_ by a

network unit (Claim 44). By the same token, column 3, lines 29-64 of Alperovich et al _fails_

to suggest subscriber _areas_ can be stiplulated repeatedly and/or with _various_ radio cells

(only a _single_ base station 33 is shown).

Column 3, lines 29-64 of Alperovich et al relate to determining position of the

mobile phone 14 by monitoring the _identity number_ of a _very_ small cell in which the

mobile phone 14 is located. Accordingly, Alperovich et al fail to suggest the features of

determining whether the _radio cell_ is located in a home zone (Claims 55 and 58), and the

radio cell transmitting coordinates providing information and current position of the _radio_

cell (Claims 56, 57, 59 and 60).

(E)   THE COMBINATION OF REFERENCES FASHIONED IN THE FINAL REJECTION
        FAILS TO ESTABLISH A CASE OF PRIMA FACIE OBVIOUSNESS

As enunciated in M.P.E.P. §2142, to establish a _prima facie_ case of obviousness,

(1) some suggestion or motivation to combine or modify the reference teachings
must exist,

(2) there must be a reasonable expectation of success, and

(3) the references, in combination, must teach or suggest _all_ the claim limitations.

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When setting the teaching of the applied art against the standards of M.P.E.P. §2142 set forth *supra,*

(1) There is <u>no</u> motivation to combine or modify the teachings of Alperovich et al with Yun and/or Béliveau. <u>None</u> of these references teach or suggest the claimed invention comprising, among other features, at least one radio cell arranged to <u>transmit</u> a signal containing coordinates <u>to</u> a mobile user unit and calculating whether the coordinates transmitted <u>by</u> the radio cell lie within the subscriber area. The <u>totality</u> of a reference's teachings must be considered. *W.L. Gore & Assoc., Inc. v. Garlock, Inc.,* 721 F.2d 1540, 1550-51, 220 USPQ 303, 311 (Fed. Cir. 1983), *cert. denied,* 469 U.S. 851 (1984). The <u>only</u> motivation to prepare the presently claimed invention is found in the present patent application itself, so the combination of Alperovich et al with Yun and Béliveau at <u>most</u> constitutes impermissible <u>hindsight</u> reconstruction of the present invention in light of the disclosure found in the present application. The patent application <u>cannot</u> be used as a <u>guide</u> through the maze of prior art references to combine the right references in the right fashion to teach the claimed invention. *Grain Processing Corp. v. American Maize-Products Corp.,*840 F.2d 9902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988). The patent application <u>cannot</u> be used a template to fill in the gaps or deficiencies in the prior art teachings. *In re Gorman,* 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991); and *In re Fritch,* 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992).

(2) There is <u>no</u> reasonable expectation of success. As pointed out *supra,* the methods and systems taught in these references suffer disadvantages which the claimed invention explicitly ameliorates; the <u>only</u> indication of success with the presently claimed

invention is found in the present application, which cannot be used to fashion an impermissible hindsight reconstruction of the claimed invention; and

(3) Alperovich et al, Yun and Béliveau all fail to teach all the claim limitations. Accordingly, these references, in combination, fail to establish a *prima facie* case of obviousness of the claimed invention.

(8) CONCLUSION

For the forgoing reasons and all reasons of record, it is submitted all appealed Claims 28-60 are patentable over the prior art relied upon by the Examiner. Accordingly, reversal of the final rejection of all claims by the Board is believed to be warranted and respectfully requested.

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Respectfully submitted,

George M. Kaplan
Reg. No.: 28,375
Attorney for Applicant(s)

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DILWORTH & BARRESE, LLP
333 Earle Ovington Blvd.
Uniondale, New York 11553

(9) CLAIMS APPENDIX

Appealed Claims 28-62 are as follows:

28. A communication system for a mobile radio telephone system having at least one network unit which serves a predetermined overall area, comprising

at least one subscriber area within this overall area stipulated and having allocated at least one subscriber number,

at least one radio cell arranged in the overall area to transmit a signal containing coordinates to a mobile user unit within the system, and

means for calculating whether the coordinates transmitted by the radio cell responsible for transmission lie within the subscriber area.

29. The communication system according to claim 28, wherein four subscriber areas are provided, with the first subscriber area preferably being allocated to a home location of a user, and the second subscriber area preferably being allocated to a business location of the user.

30. The communication system according to claim 28, wherein individual subscriber areas can overlap several selected subscriber areas.

31. The communication system according to claim 29, wherein the subscriber areas have varying application priorities.

32. The communication system according to claim 28 comprising a plurality of subscriber areas, wherein the subscriber areas is written into a subscriber code module (SIM).

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33. The communication system according to claim 28, wherein the subscriber area encompasses several radio cells and/or serves several user units.

34. The communication system according to claim 28, wherein a first subscriber number constitutes a mobile subscriber number, and a second subscriber number constitutes a geographic number.

35. The communication system according to claim 34, wherein at least one storage area (cache) containing the subscriber area on a subscriber code module (SIM).

36. The communication system according to claim 28, wherein the subscriber area is stipulated by a location and local radius.

37. The communication system according to claim 28, wherein the local radius is determined by scanning several radio cells situated around the location and the local radius is measured as a function of reception strength.

38. The communication system according to claim 28, wherein a fixed station or several fixed stations is/are additionally provided within the subscriber area.

39. The communication system according to claim 38, wherein location coincides with the position of the fixed station.

40. The communication system according to claim 28, wherein a display is provided in a user unit to indicate whether the user unit is located within the subscriber area.

41. The communication system according to claim 28, wherein a global system for mobile communication (GSM) is used.

42. The communication system according to claim 41, wherein a first and second code are provided, the first code signals whether a user unit is authorized in the subscriber area, and the second code signals whether a stipulation has already taken place relative to the subscriber area.

43. A method for operating a communication system for a mobile radio telephone system, which comprises the following steps:

providing a network unit with an overall area;

stipulating at least one subscriber area within its overall area, and

allocating at least one subscriber number in the subscriber area,

wherein the overall area incorporates at least one radio cell that transmits a signal containing coordinates to a mobile user unit within the system, and

a calculation is performed to determine whether the transmitted coordinates for the radio cell lie within the stipulated subscriber area.

44. The method according to claim 43, wherein the subscriber area is stipulated by the network unit.

45. The method according to claim 44, wherein the subscriber area is stipulated by

a)   specifying a location;

b)   measuring local radius using a graphic information system (GIS) with a database containing locations and considering that the local radius contains several radio cells;

c)   storing the location and local radius in a network unit file; and

d) transmitting the location and local radius to a subscriber detection module as

a user unit.

46.   The method according to claim 43, wherein the

subscriber area is stipulated by a user unit.

47. The method according to claim 46, wherein the subscriber area is stipulated by

a)   checking a first and second code, wherein the first code signals whether the

user unit is authorized in the subscriber area, and the second code signals whether a

stipulation has already taken place relative to the subscriber area;

b)   selecting the radio cells present around the user unit based on signal

strengths;

c)   recording the radio cell currently used for switching;

d)   determining urban network code and cell code (cell ID) based on the

        recorded

radio cell;

e)   transmitting the urban network code and cell code to a centralized point of

        the

network unit and simultaneously storing address of the centralized point in a subscriber

code (SIM);

f)   determining location and local radius based on a file provided in a

        centralized

point containing all radio cells;

g)   generating a subscriber file within the centralized point, which is write

protected;

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h) transmitting the location and local radius to the subscriber code module of the user unit; and

i) updating the location and local radius stored in the user unit.

48. The method according to claim 45 wherein square of the local radius is transmitted to a subscriber code module (SIM).

49. The method according to claim 45, wherein a display indicates whether the user unit is located in the subscriber area.

50. The method according to claim 49, wherein a check is performed to determine whether a new radio cell lies within a prescribed subscriber area.

51. The method according to claim 50, wherein a display indicates which subscriber area is activated.

52. The method according to claim 43, wherein incoming information is relayed if a user unit is located outside the subscriber area.

53. The method according to claim 43, wherein the subscriber areas can be stipulated repeatedly and/or with various radio cells.

54. The method according to claim 43, wherein two subscriber calls are allocated in a subscriber area.

55. The communication system according to claim 28, wherein said means additionally determine whether the radio cell forming part of a mobile telephone is located in a home zone.

56. The communication system according to claim 55, wherein said radio cell transmits the signal containing the coordinates which provide information on the current location of the radio cell.

57. The communication system according to claim 28, wherein said radio cell transmits the signal containing the coordinates which provide information on the current location of the radio cell

58. The method of claim 43, comprising the additional step of determining whether the radio cell forming part of a mobile telephone is located in a home zone.

59.The method of claim 58, wherein said radio cell transmits the signal containing the coordinates which provide information on the current location of the radio cell.

60. The method of claim 43, wherein said radio cell transmits the signal containing the coordinates which provide information on the current location of the radio cell.

61. A communication system

for a mobile radio telephone system having at least one network unit which serves a predetermined overall area, comprising

at least one subscriber area within this overall area stipulated and having allocated at least one subscriber number,

at least one radio cell arranged in the overall area to transmit a signal containing coordinates to a mobile user unit within the system, and

means for calculating whether the coordinates transmitted by the radio cell responsible for transmission lie within the subscriber area, wherein

said mobile user unit comprises a subscriber code module in which coordinates and a radius of said at least one subscriber area is stored, and

said calculating means additionally determine whether

absolute difference between the coordinates transmitted by the radio cell and said at least one subscriber area exceed a predetermined value, and

if the predetermined value is not exceeded, square of said difference exceeds square of said radius.

62. A method for operating a communication system for a mobile radio telephone system, comprising the steps of

providing a network unit with an overall area;

stipulating at least one subscriber area within its overall area,

allocating at least one subscriber number in the subscriber area,

incorporating, in the overall area, at least one radio cell that transmits a signal containing coordinates to a mobile user unit within the system,

performing a calculation to determine whether the transmitted coordinates for the radio cell lie within the stipulated subscriber area,

storing coordinates and a radius of said at least one subscriber area in a subscriber code module located within said mobile user unit,

calculating and determining whether absolute difference between the coordinates transmitted by the radio cell and said at least one subscriber area exceed a predetermined value, and

if the predetermined value is not exceeded, calculating and determining whether

square of said difference exceeds square of said radius.

(10) <u>EVIDENCE APPENDIX</u>

None

(11) RELATED PROCEEDINGS APPENDIX

None